flowered in cultivation at Jardín Botánico Lankester, 3 June 2001, *M.A. Blanco 1324* (holotype, USJ!; isotype, SEL!).

Species Myoxantho aspasicensi (Rchb.f.) Luer similis, sed planta floribusque omnine minoribus, ovario pubescente, sepalis purpureo vittatis, interne laevis, synsepalo lanceolato, apice petalorum dorsaliter tuberculato, labello ligulato apice laevi differt.

*Plant* epiphytic, cespitose, up to 17 cm tall, roots coarse. Ramicauls stout, erect, 4-7 cm long, enclosed by 3-4 loose, tubular sheaths sometimes fragmented. Leaf erect, thickly coriaceous, narrowly lanceolate-elliptic, minutely emarginate, 7-10 cm long, 1.3-1.5 cm wide, cuneate below into a conduplicate, sessile base. Inflorescence a fascicle of single, successive flowers, at the apex of ramicaul, the peduncle sparsely pubescent, 8-13 mm long, subtended by a papyraceous spathe 1.4-1.6 cm long; pedicels 2-3 mm long; ovary less than 1 mm long, densely pubescent. Flowers small, whitish, longitudinally striped with purple, fleshy, densely short-pubescent externally, glabrous within. Dorsal sepal linear-oblanceolate, obtuse, 10-12 mm long, 3 mm wide, 5-veined. Lateral sepals connate into a lanceolate, shortly emarginate, concave synsepal, 10-13 mm long, 4-5 mm wide, each half 4-veined. Petals fleshy, linear-oblong, obtuse, minutely apiculate, adaxially provided with a tuft of short papillae near the apex, 4 mm long, 1 mm wide, 3veined. Lip 3-lobed, ligulate, subacute, 4 mm long, 2.5 mm wide between lateral lobes; the apical lobe smooth, slightly undulate along the margins; the lateral lobes erect, narrowly uncinate, antrorse; the disc with an erect, narrow, low, channeled callus above the base, extending in front into a low keel just to near the lip apex, laterally provided with a pair of low lamellae extending to the apex, hinged on the end. Column arcuate, semiterete, 1.6 mm long, provided with narrow wings above the middle, the foot less than 1 mm long. Anther cap globose, with long hairs on the upper margin, 2-celled. Pollinia 2, obovoid, flattened, on a short caudicle.

ETYMOLOGY: from the Latin *vittatus*, "longitudinally striped", in reference to the stripes on sepals and petals.

Myoxanthus vittatus Pupulin & M.A. Blanco, sp. nov. FIG. 1

TYPE: Costa Rica. San José: Pérez Zeledón, El Brujo, near Río División, 450 m, 30 Jan. 2000,

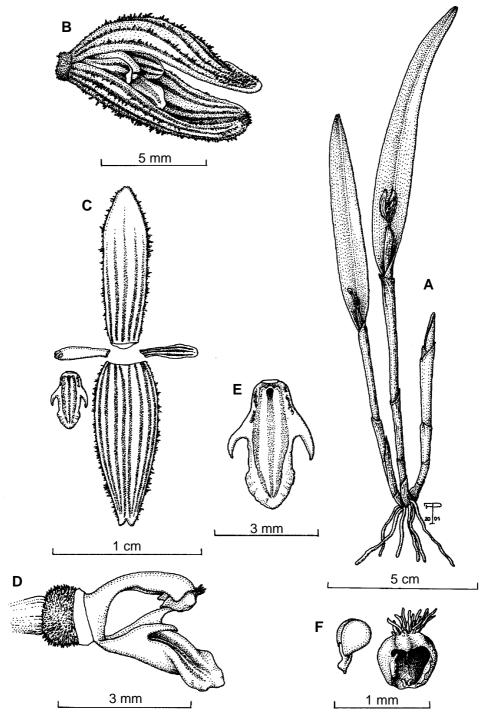


Figure 1. *Myoxanthus vittatus* Pupulin & M.A. Blanco. A - Habit. B - Flower. C - Dissected flower (petal to the left in abaxial view). D - Column and lip, lateral view. E - Lip, spread. F - Pollinarium and anther cap. ILLUSTRATION VOUCHER: *M.A. Blanco 1324* (USJ). Drawn from the holotype.

DISTRIBUTION AND ECOLOGY: Known only from two specimens from the same area in central Pacific Costa Rica, epiphytic in tropical wet forest, premontane belt transition, at 450 m elevation.

PHENOLOGY: Flowering occurs from March to June.

PARATYPE: COSTA RICA. San José: Pérez Zeledón, Viento Fresco del Brujo, 450 m, epiphytic on cultivated trees in the village, 21 Jan. 2001, flowered in cultivation at Gaia Botanical Garden, 13 June 2001, *F. Pupulin, D. Castelfranco & L. Elizondo 2878* (USJ, Spirit Coll.!).

Myoxanthus vittatus is closely related to M. aspasicensis, Pleurothallis tomentosa, M. sem pergemmatus and M. uncinatus, but it is distinguished by the small size, the densely pubescent ovary, the whitish flower striped with purple, the sepals adaxially smooth, and the ligulate, obtuse lip.